Hanford Facility RCRA Permit Modific	cation Notifica	tion Form		
Unit:	Permit Part & Chapter: 300 Area WATS Part A, Form 3			
300 Area Waste Acid Treatment System				
Description of Modification:				
300 Area WATS Part A, Form 3, Comment Block: Page 1.				
Partial Closure Plan Completed, 12/03/01				
Modification Class: 123	Class 1	Class 11	Class 2	Class 3
Please check one of the Classes:	X			
Relevant WAC 173-303-830, Appendix I Modification:	A.1.			
Enter wording of the modification from WAC 173-303-830, Ap A. General Permit Provisions 1. Administrative and Informational changes.	pendix I citation			
Submitted by Co-Operator: Reviewed by RL Program Office:	Reviewed by E	cology:	Reviewed by	Ecology:
Chorto 3.21 or Vaved Wempletre 4/1/02 7	W. Bond	5-6-02	Allis	5-20-
N. C. Boyter Date D. T. Evans Date	R. Bond	Date	L.E. Ruud	Dat

¹ Class 1 modifications requiring prior Agency approval.

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³ If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to ¹1, if appropriate.

Page 6 of 10 Hanford Facility RCRA Permit Modification Notification Form Unit: Permit Part & Chapter: 300 Area WATS Part A, Form 3 300 Area Waste Acid Treatment System Description of Modification: 300 Area WATS Part A, Form 3, Section III.C: The 300 Area Waste Acid Treatment System (300 Area WATS) permanently ceased operations in 1995. Information provided on this form pertaining to unit processes, design capacities, or dangerous waste managed at the unit is for historical purposes only. The 300 Area WATS was a tank system that operated from 1973 until 1995 treating and storing mixed and dangerous waste. 'Partial' closure activities for this unit began in 1996 and were completed September 1999. Closure activities occurred in three phases and in accordance with the approved closure plan and the requirements of Part V, Chapter 20 of the Hanford Facility RCRA Permit (Permit Number WA7890008967). Clean closure was achieved for all 300 Area WATS locations and components with the exception of two locations of potential soil contamination. The areas of potential soil contamination are defined by Part V, Chapter 20, of the Hanford Facility Resource Conservation and Recovery Act of 1976 (RCRA) Permit (Permit Number WA7890008967) and are shown as Area 1 and 2 in the Figure. Area 1 is located beneath the concrete WATS and U-Bearing Piping trench that itself is not a portion of the TSD unit. Area 2 is located beneath the scabbled concrete floor of the 313 Building. In December 2001, Ecology (Letter, G. P. Davis, Ecology, to J. B. Hebdon, U.S. Department of Energy) accepted certification for the clean closed 300 Area WATS locations and released these clean closed locations from the requirements of RCRA and Chapter 173-303 of the Washington Administrative Code (WAC). The soil at Areas 1 and 2 will remain unclosed and regulated by RCRA, Chapter 173-303 WAC until soil disposition in conjunction with the future 300-FF-2 Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) Operable Unit remedial action. Concrete surfaces over unclosed soil will remain until the time of soil disposition. Closure of these areas will complete 300 Area WATS closure. T01, S02, T04 The 300 Area Waste Acid Treatment System (300 WATS) and Tank 40 began waste management operations in April 1973; auxiliary equipment and centrifuge operations began in November 1995. The 300 WATS was used for the treatment and storage of mixed waste generated during fuel fabrication operations in the 300 Area. The 300 WATS also was used for disposing of used and/or unneeded chemicals for other Hanford Facility operations. A portion of the waste initially was treated in two tanks (tanks 7 and 11) in the 333 Building to reduce the chromium (VI) to chromium (III). From May 1983 to January 1987, tanks 7 and 11 were used twice a year to treat up to 757 liters (200 gallons) per day of waste (T01). This waste, along with all other waste acid generated in the 333 Building, was drained to the 334-A Building and stored in two storage tanks (tanks Band C) (S02), with a combined volume of 15,142 liters (4,000 gallons). Previously, waste entered the 334-A Building passing through a settling tank [tank A, volume 1,363 liters (360 gallons)] before entering tanks B and C. Tank A ceased receiving waste in August 1984 when piping was disconnected to the tank and waste was routed directly to tanks B and C. Tank A was cleaned out and the polyvinyl chloride liner removed in 1988. From startup in April 1973 until August 1973, the waste acid from the 333 Building was collected in a plastic-lined steel underground 14,385 liter (3,800 gallon) tank and a plastic-lined steel aboveground 22,712 liter (6,000 gallon) tank (tank 4) in the 334 Tank Farm. At that time, the underground tank developed a leak and was removed from service. The 334-A Building storage tanks replaced this underground tank in December 1974. Tank 4 was retained for emergency storage when the 313 Building neutralization activities were down for maintenance or modifications. Tank 4 usually was empty and when the tank was filled in January 1986, a leak developed near the top of the tank. Tank 4 was emptied and abandoned at that time. Tank 4 was removed, cleaned, and disposed of onsite in 1988. The waste acid was pumped from the 334-A Building to the 313 Building where the waste acid underwent pH adjustment in a waste acid neutralization tank (tank 2) (T01). Tank 2 was capable of treating a maximum of 13,249 liters (3,500 gallons) per day of waste acid. The waste acid was pumped from tank 2 to tank 11 and then to a centrifuge where the waste acid underwent further treatment to separate the liquid and solid phases (T04). A maximum of 11,356 liters (3,000 gallons) of waste acid per day could be treated in the centrifuge. The solid waste from the centrifuge was collected in containers and transferred to the 303-K Storage Unit. The liquid effluent was pumped from the centrifuge to tank 5 and to a filter press for additional treatment to remove fine solids (T04), which remained following treatment in the centrifuge. The filter press treated a maximum of 4,542 liters (1,200 gallons) per day. Solids collected in the filter press were sent to the uranium recovery system or to the 303-K Storage Unit. The filtered liquid effluent was drained into effluent collection tanks (tanks 9 and 10), where the liquid effluent was stored temporarily before being pumped to the 311 Tank Farm. T01, S02 - The 311 Tank Farm was used for storage of treated liquid effluents from both the 300 WATS and the uranium recovery process. Storage occurred in two tanks (tanks 40 and 50) with capacities of 15,142 and 18,927 liters (4,000 and 5,000 gallons), respectively. Tanks 40 and 50 are constructed of stainless steel. Tank 50, the 18,927 liter (5,000 gallon) tank, occasionally was used for decanting waste when the centrifuge in the 313 Building was down for maintenance. Tank 50 was capable of treating up to 18,927 liters (5,000 gallons) per day, but only was used occasionally for decanting waste (a total of five times between January 1986 and December 1987). Auxiliary equipment (two pumps, two cartridge filters, and two sample ports) are housed in the adjacent 303-F Building. Auxiliary equipment was used to filter solutions and to recirculate the solutions between various tanks and the 313 Building for reprocessing. Modification Class: 123 Class 11 Class 1 Class 2 Class 3 X Please check one of the Classes: Relevant WAC 173-303-830, Appendix I Modification: A.1. Enter wording of the modification from WAC 173-303-830, Appendix I citation A. General Permit Provisions 1. Administrative and Informational changes. Submitted by Co-Operator: Reviewed by RL Program Office: Reviewed by Ecology: 5-6-02 4/2/02

Date

N. C. Boyter

D. T. Evans

Date

R. Bond

Date

L.E. Ruud

Date

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Hanford Facility RCRA Permit Modification Notification Form Unit: Permit Part & Chapter: 300 Area Waste Acid Treatment System 300 Area WATS Part A, Form 3 Description of Modification: 300 Area WATS Part A, Form 3, Figure: Replace figure. 300 Area Waste Acid Treatment System Areas of unclosed 300 Area Waste Acid Treatmen System Soil Beneath 334-A Waste Acid Storage Tanks (Tanks A, Band C) EGOOO 303-M 334 Tank Farm¹ (Tank 4 removed 1988) concrete Structures Chromium Treatment 3716 300 Area Waste Acid Treatment System Boundary; Cleaned Closed Tanks: Tank 72 119°16'42" Waste Acid Transfer Lines 303-G 311 Tanks: 3712 Tank 401 _ Tank 501 119°16'46' 303-F Hanford Site 313 BUILDING Components: Waste Acid Neutralization Tank (Tank 2) Effluent Collection Tanks (Tanks 5, 9, 10 & 11) 119°16'48 200 Feet 100 60 Meters 46*22'21" 46°22'16" Notes: 1. Clean closed in place 2. Removed H00020171.1R6 Modification Class: 123 Class 1 Class ¹1 Class 2 Class 3 Please check one of the Classes: X Relevant WAC 173-303-830, Appendix I Modification: A.1. Enter wording of the modification from WAC 173-303-830, Appendix I citation A. General Permit Provisions 1. Administrative and Informational changes. Reviewed W Ecology: Submitted by Co-Operator: Reviewed by RL Program Office: Reviewed by Ecology: 32100 5-6-02 N. C. Boyter D. T. Evans Date R. Bond Date Date L.E. Ruud Date

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Hanford Facility RCRA Permit Modification Notification Form

Unit:

Permit Part & Chapter:

300 Area Waste Acid Treatment System

300 Area WATS Part A, Form 3

Description of Modification:

300 Area WATS Part A, Form 3, Photographs: Delete all photographs replace with the following:

300 Area Waste Acid Treatment System Substructure Soil Contamination Location - Area 1



00070107-6cn (PHOTO TAKEN 2000)

Modification Class: 123	Class 1	Class 11	Class 2	Class 3
Please check one of the Classes:	X			
Relevant WAC 173-303-830, Appendix I Modification:	A.1.			
Enter wording of the modification from WAC 173-303-830, A A. General Permit Provisions 1. Administrative and Informational changes.	ppendix I citation			-
Submitted by Co-Operator: Reviewed by RL Program Office: N. C. Boyter Date P. D. T. Evans Date	Reviewed by Ed HN Bond R. Bond	cology: 5-6-02 Date	Reviewed by L.E. Ruud	Ecology: 5- <u>20-0</u> Date

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Unit:

Permit Part & Chapter:

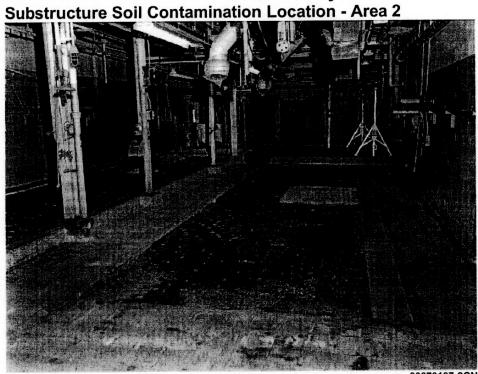
300 Area Waste Acid Treatment System

300 Area WATS Part A, Form 3

Description of Modification:

300 Area WATS Part A, Form 3, Photographs: Add the following photograph.

300 Area Waste Acid Treatment System



00070107-2CN (PHOTO TAKEN 2000)

Class 1	Class 1	Class 2	Class 3
X			
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ndix I citation			
Reviewed by Ec Sond R. Bond	cology: 5-6-62 Date		Ecology: 5-20-02 Date
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